

From owner-qrp-1@netcom.com Tue May 16 11:05:52 1995
From: JimN00CT@aol.com
Date: Tue, 16 May 1995 07:05:52 -0400
Message-Id: <950516070551_120314319@aol.com>
Subject: Re: "HOTEL PORTABLE" POWER SU

Y'all....

One other source of cheap, luggable supplies would be old portable (lap top, etc) computer supplies. These run around 14 V @ 1 amp, and should handle the 40-40 or NorCal 40 easily.

Look around, they can be had at flea markets for around \$5. Some even have a RFI suppression ferrite molded onto the DC line. Also, they are not too terribly big.

73, jim N00CT

From owner-qrp-1@netcom.com Tue May 16 01:50:45 1995
From: david.gauding@slug.org (David Gauding)
Subject: "Tree Toppers"
Date: Tue, 16 May 1995 01:50:45 GMT
Message-Id: <950515210009979@slug.org>

I've tried just about everything up to and including the "armstrong method" to get messenger lines into trees. Comments follow:

Bow & Arrow: Without a heavy hunting tip or other weight, the arrow rarely has enough mass to pull the line down to the earth on the other side of the tree. This goes double for pine-type trees with soft bark and sap! The theory is great but in practice.....!

Sling Shot: Better than the above but prone to misfires. And, that weight hurts when it smacks into your hand in the middle of winter. Works in hands of an expert with a little luck!

Ultra-light Fishing Tackle: A nicely matched ultra-light rod and reel has been my weapon of choice for fifteen years, works so well it almost hurts. 2 or 4lb line and a decent bell fishing sinker is all it takes. I can consistently top 75' trees with this method, probably higher if I can find one here in Missouri! The trick to reaching the high ones is a sweeping two-handed cast.

A couple of caveats! What goes up comes down including bell sinkers!!!
Make sure you have some forward angle to your cast. Painting the sinker
flourescent red really helps locate it in the leaves and grass.

Anyway, this method works well for me. I hope you'll give it a try this
summer!

73 de Dave, NF0R

From owner-qrp-l@netcom.com Tue May 16 13:28:55 1995
From: rohrwerk@netcom.com (John Seboldt)
Message-Id: <199505161328.GAA04827@netcom8.netcom.com>
Subject: Re: "Tree Toppers"
Date: Tue, 16 May 1995 06:28:55 -0700 (PDT)

> I've tried just about everything up to and including the "armstrong
> method" to get messenger lines into trees. Comments follow:

[snip]

> Sling Shot: Better than the above but prone to misfires. And, that

[snip]

>

> Ultra-light Fishing Tackle: A nicely matched ultra-light rod and reel
> has been my weapon of choice for fifteen years, works so well it almost
> hurts. 2 or 4lb line and a decent bell fishing sinker is all it takes.
> I can consistently top 75' trees with this method, probably higher if I
> can find one here in Missouri! The trick to reaching the high ones is a
> sweeping two-handed cast.

>

> 73 de Dave, NF0R

>

A slingshot with a 1 inch or so diameter rock works well for me. Tie some
fishing line (from a rod and reel) on the rock (secured with duct tape), and
shoot. A minimum of 10 pound test or so line works best for me.

: John Seboldt rohrwerk@netcom.com / CW: It don't mean a thing
: Amateur radio K0JD... / if it ain't got that swing!
: Church of the Annunciation, / Di dah, di dah, di dah, di dah...
: Minneapolis / (sorry, Duke!)

From owner-qrp-l@netcom.com Tue May 16 04:10:04 1995
Date: Mon, 15 May 1995 23:10:04 -0500 (CDT)

From: Greg Hemming <gregh@freenet.mb.ca>
Subject: 20 mtrs Alive ??
Message-Id: <Pine.SUN.3.91.950515225901.12722A-1000000@winnie.freenet.mb.ca>

Gang,

For those of you that might be interested... for the last couple of evenings, 20 mtrs has remained open quite late.

Hope to see you on or around 14.060 (worked 6 land around 04:00 utc)

72/73

Greg (VE4GH) MIQRP # 1134

internet: gregh@freenet.mb.ca
: 76443.2243@compuserve.com

Snail Mail: Greg Hemming
411 Ralph Ave. West
Winnipeg, Manitoba
R2C 2E8

From owner-qrp-1@netcom.com Tue May 16 14:16:33 1995
Date: Tue, 16 May 95 10:16:33 EDT
Message-Id: <heH8+YH9ijA@PAMDT.ANG.AF.MIL>
From: <CBAILEY@PAMDT.ANG.AF.MIL> (MSgt Cameron C.R. Bailey)
Subject: re: 20 mtrs Alive ??

I understand that 6 meters has been hot with sporadic E.
Anyone finding 10 meters open?

72 de kt3a

Cam Bailey
SOGNET LAN Administrator (Banyan)
211 Engineering Installation Squadron
Fort Indiantown Gap (Annville) PA
DSN: 491-8737 Comm: 717-861-8737 FAX: 8268

From owner-qrp-1@netcom.com Tue May 16 13:56:22 1995
Date: Tue, 16 May 95 08:56:22 CDT
Message-Id: <9505161356.AA04571@epcot.spdc.ti.com>
From: serafin@spdc.ti.com (Michael A. Serafin)
Subject: 610-v

Yea, I got the same letter, but I had also ordered some form 610-Bs, the club call form. Weeeell, the invoice said they shipped 610-Bs, but I ended up with FCC 539 something or the other. Which is broadcast station employee information.

Efficiency in action.

>i just got a 'letter' from the fcc saying forms
>for the vanity call sign are not available until
>july sumtime.....the letter was in response to my
>using their 800 number to order up forms...
>(u get to speak w/ an answering machine that in-
>structs u to leave ur name, address, and etc.)
>....i now have a customer number!!!....and i
>get to send in a form to get a form....and
>all of this in response to a fone call....
>
>isn't a large govmnt agency maze fun????
>(hope tis doesn't start another ugly thread
>like the one about weather in ohio)
>.....baab, n6cxb.....
>bfinch@asp.vet.purdue.edu
>
>
>

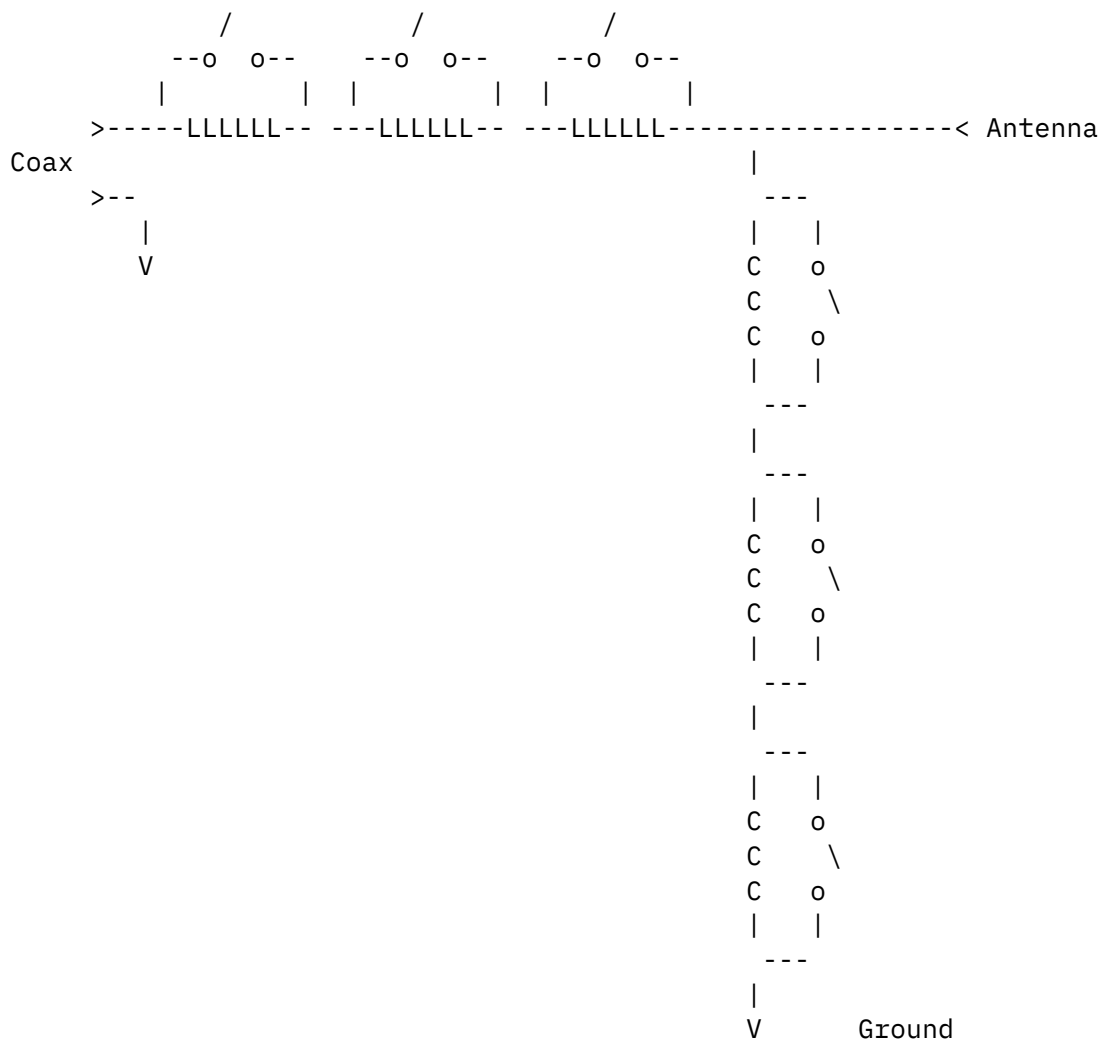
From owner-qrp-1@netcom.com Tue May 16 02:14:30 1995
From: JEVERHART@cayman.vf.mmc.com
Date: Mon, 15 May 1995 22:14:30 -0400 (EDT)
Message-Id: <950515221430.2029085e@carib.vf.mmc.com>
Subject: Re: Capacitors for Tuners, reed relays

"rohre" <rohre@arlut.utexas.edu> wrote, in part:

> It should not be a major leap for someone to homebrew a reed relay
> switched antenna transmatch. Or one could do a manual one with
> various combinations of switched caps, if you had a roller inductor

> for the continuous coverage of LC products. Considering the objective
 > is to get the match within the range of the rig, even if you used
 > switched caps and inductor, you could get close enough to 1.5:1 for
 > most purposes.

Such tuners are indeed feasible and, indeed, commercially available. I know of one made by King Radio for HF aircraft radios and suspect that numerous manufacturers make tuners with similar designs. The King unit uses an "L" network as outlined below:



I apologize for the crudity of the schematic, but I think you get the idea. And though I've only shown three capacitors and three resistors, In the real unit, there are many more, with capacitors in the ratio of 1,2,4,8,16...pf and the inductors approximately the same, that is, 1,2,4,8,16...uH. Each switch is a reed relay and the whole thing has a phase sensor and a VSWR sensor on the coax end.

Its microprocessor controller automatically adjusts the thing in several hundred milliseconds after key up and remembers settings so that retuning is not needed each time you transmit. As I remember, it is rated to give 2:1 or better vswr over a range of 10 to a couple of thousand ohms resistive and reactive over 3 to 30 MHz.

Pretty impressive and quite complex, but certainly doable.

I have no interest, financial or other wise in King. Merely intellectual curiosity about antennas and tuners. The King unit was an example used in an antenna course I taught at work.

Hope this proves interesting to you.

72/73,

Joe E. N2CX

From owner-qrp-l@netcom.com Mon May 15 19:31:52 1995
Date: Mon, 15 May 1995 13:31:52 -0600 (MDT)
From: Rick Zabrodski <zabrodsk@med.ucalgary.ca>
Subject: cascade RS microphone
Message-Id: <Pine.SUN.3.91.950515132537.18138A-1000000@ume>

Saw my check has cleared for the cascade so went shopping for the RS mic. \$39.99 canuck bucks (Thats about \$29 us) Wonder how much they are south of the 49th parallel?

Plus for me is that it happens to also work on my alinco dual band handie. Will try it out on the epiphyte as well.
In fact, with adaptors it also works with my Terra aviation handie talkie.... I may have to buy another one as one mike for 4 radios is stretching it thin!

Dr. Rick Zabrodski BSc, MD, CCFP(E)	*	VE6GK
Email: zabrodsk@med.ucalgary.ca	*	NorCal 519 ARCI 7650 GQRP 8329
Phone 403-271-5123 Fax 403-225-1276	*	"Power is no substitute for skill"

From owner-qrp-l@netcom.com Tue May 16 03:17:08 1995
From: Michael Marmor <mmarmor@pluto.njcc.com>

Message-Id: <199505160317.XAA14691@pluto.njcc.com>
Subject: Re: Colorburst Freq still active
Date: Mon, 15 May 1995 23:17:08 -0400 (EDT)

> Keep tuning around the colorburst frequency and good luck to all the folks
> trying this week with their pixie 2 transmitters. I should have mine finished
> this week and will join the group.
>
> 72 de Ted, KF8EE

Is everybody using the colorburst frequency for their Pixie 2's? I
used a 3.686 crystal which seems like a quieter frequency -- all
I get on 3.57 is noise! I hope I'm not the only one on 3.686....

Mike, AA2UJ
mmarmor@pluto.njcc.com

From owner-qrp-l@netcom.com Tue May 16 03:43:08 1995
Date: Mon, 15 May 1995 17:43:08 -1000 (HST)
From: Jeffrey Herman <jeffrey@math.hawaii.edu>
Subject: Re: Colorburst Freq still active
Message-Id: <Pine.SUN.3.91.950515173446.22015F-100000@kahuna>

Let's put some color in our DX. I'll be hanging out on 3579 kc
Friday, say, 2100 Hawaii (0800 GMT Saturday). I think my little
colorburst xmtr puts out about 1-2 W. Pray for a propagation
miracle.

Jeff NH6IL

From owner-qrp-l@netcom.com Tue May 16 03:44:25 1995
Date: Mon, 15 May 1995 17:44:25 -1000 (HST)
From: Jeffrey Herman <jeffrey@math.hawaii.edu>
Subject: Re: Colorburst Freq still active
Message-Id: <Pine.SUN.3.91.950515174339.22015G-100000@kahuna>

oops - 2100Hawaii = 0700GMT

Jeff NH6IL

From owner-qrp-l@netcom.com Tue May 16 13:09:28 1995
Date: Tue, 16 May 1995 10:39:28 -0230 (NDT)

From: Bob Gobrick V01DRB/WA6ERB <bgobrick@terra.nlnet.nf.ca>
Subject: Re: Colorburst Freq still active
Message-Id: <Pine.OSF.3.91.950516103628.18450B-1000000@terra.nlnet.nf.ca>

Mike,

I think the colourburst freq of 3.579 has the momentum of being "the" Pixie freq. Mainly based on the annual QRP Club of New England ColourBurst contest that occurs every autumn. Anyway that shouldn't stop you from making contacts on your frequency - just a better chance to hear others on 3.579 - plus you get to listen to W1AW every evening - hi.

73/72 and Good luck and have fun. Bob V01DRB/WA6ERB

On
Mon, 15 May 1995, Michael Marmor wrote:

> > Keep tuning around the colorburst frequency and good luck to all the folks
> > trying this week with their pixie 2 transmitters. I should have mine finished
> > this week and will join the group.
> >
> > 72 de Ted, KF8EE
>
> Is everybody using the colorburst frequency for their Pixie 2's? I
> used a 3.686 crystal which seems like a quieter frequency -- all
> I get on 3.57 is noise! I hope I'm not the only one on 3.686....
>
> Mike, AA2UJ
> mmarmor@pluto.njcc.com
>

Bob Gobrick V01DRB/WA6ERB/VE2DRB Newfoundland, Canada

QRPer Galore - QRP ARCI, GQRP, NORCAL, NEQRP, COQRP, MIQRP, NWQRP

Internet: bgobrick@terra.nlnet.nf.ca
rgobrick@public.compuserve.nf.ca

Compuserve: 70466.1405@compuserve.com

From owner-qrp-1@netcom.com Tue May 16 15:26:21 1995

Date: Tue, 16 May 1995 11:26:21 -0400
From: teda@meaddata.com (Ted Albert)
Message-Id: <9505161526.AA15801@rain.meaddata.com>
Subject: Re: Colorburst Freq still active

> Is everybody using the colorburst frequency for their Pixie 2's? I
> used a 3.686 crystal which seems like a quieter frequency -- all
> I get on 3.57 is noise! I hope I'm not the only one on 3.686....
>
> Mike, AA2UJ
> mmarmor@pluto.njcc.com
>

3.686 is another possibility. That crystal is also available from many sources for around a \$1. I have a second pixie board that may get built for that frequency.

72 de Ted, KF8EE

From owner-qrp-l@netcom.com Wed May 17 00:05:23 1995
Message-Id: <n1411474886.69648@msmailgw1.arlut.utexas.edu>
Date: 16 May 1995 18:05:23 -0600
From: "rohre" <rohre@arlut.utexas.edu>
Subject: Comments on original Windom & now

Cleve raised a question of what antenna he should put up with 125 foot of space, and essentially asked "a Windom or a G5RV?"

Now there are discussions of the Windom as practiced today and originally in a number of texts, one is in a RSGB, (U.K.) antenna publication.

It points out as do the others that the original Windom antenna used a single wire feed, off center, and of course that vertical part radiated as did the flat top. The original was I believe based on the half wave dipole length for the flat top.

Now if you examine the curves for the half wave dipole voltage and current in the RSGB handbook, ARRL Handbook, Antenna Book, the W6SAI antenna books, etc., all agree the maximum current is at the center, and therefore, that is the ONLY place the impedance is low enough to use normal low impedance coax to feed a dipole flat top. There are some "Windom's" advertised that must use some matching device, (lossy) to do otherwise.

Three hundred ohm twin lead that Cleve asked about as an alternative feed on the Windom, is designed, as is ladder line, to feed a balanced point on an antenna,

where it would see equal halves of the antenna for each of the feeders. This a "Windom" does not have, when off center fed. Analysis by computer programs that were not available in Windom's day show any attempt to use this design with coax or twin lead feeder is less than optimum to say the least! Remember, even Windom himself was using a single wire feed, against ground to achieve energy transfer to what is still a higher impedance point on the antenna than the center. There is then, no advantage to the Windom that cannot also be fulfilled by some of the G5RV variants. Or even a balanced line fed dipole fed thru a balanced tuner for all bands coverage.

I have had good success with one G5RV variant by a ZS6 that W6SAI published in his CQ series; but later analysis by him shows I perhaps was lucky, and actually invented a variant that made my "G5RV" work even at only 20 foot elevation of the 92 foot flat top. (This length was picked to also cover WARC bands.) What I had to do with such a low support, was to bring the 40 foot ladder line that feeds the center off at right angles to the dipole portion, at the same height, to a support off to the side. This was the 450 ohm window line. From the end of it, I spliced RG 8X without a balun, onto the ladder end, and went on to the rig with 50 or 60 feet of coax. This antenna worked very well on bands 40 meters and up, especially on 20 Meters, where the classic G5RV is a gain antenna. It even loaded on all bands I tried, without a tuner. 15 Meters had 3:1 SWR or more that reduced my power, but it communicated almost as well as the others. Only a severe storm and excessive growth of the trees at one end has ended its use for the present. (And my desire to experiment with the all band Gap Titan Vertical.)

However, given the available 125 foot flat top space, I advised Cleve that a dipole fed with ladder line and a tuner might be the best all band compromise. This has been called the McCoy dipole after Lew McCoy who often advocates it. It works, is efficient with a good tuner, and uses the space well for the purpose. What of course would also work, is to parallel other half wave dipoles onto a slightly short 80 meter dipole of 125 foot length. If you hung 5 foot tuning wires vertically off the ends, you actually would resonate the 125 foot flat top into the 80 meter band, depending upon the frequency desired. Gary Breed in RF Design magazine, recently revived the parallel dipole concept, where you do not even have to attach the parasitic, higher band dipoles to the feed coax, but just have them spaced a few inches away from the lowest frequency dipole to which the coax attaches. Plastic or fiberglass, or even PVC pipe spacers would work for such a use. If one coated wood dowels with shellac, they would serve as well for the spacers.

Perhaps someone who has one of the "Carolina Windoms" will counter what negative reports I read about the use of modern Windoms, it would be interesting for those with access to antenna analysis programs to tell us how they could work.

In the mean time, to answer Cleves' desire for a good efficient low loss antenna for 125 foot space, a center fed solution looks most desirable. And ladder

line is lower loss than coax. If bringing it to an interior shack, not on an outside wall, is a concern, I suggest reading Fred Bonivita's past articles on using ladder line, and mounting the balun under the eaves of the house, etc.

vy 72,
Stuart K5KVH

From owner-qrp-l@netcom.com Tue May 16 00:03:00 1995
Date: Mon, 15 May 1995 17:03:00 -0700 (PDT)
From: Steven Wilson <randyw@crl.com>
Subject: Re: Designing OUR OWN rig!
Message-Id: <Pine.SUN.3.91.950515170223.11977A-100000@crl9.crl.com>

Yes I would like to see something without a 602.

From owner-qrp-l@netcom.com Tue May 16 02:22:14 1995
Date: Mon, 15 May 1995 20:22:14 -0600
From: Paul Harden <pharden@aoc.nrao.edu>
Message-Id: <199505160222.UAA10581@zia.aoc.nrao.edu>
Subject: Re: Designing OUR OWN rig!

Chuck (and the rest of the gang),
Myself and another ham here at the observatory, who is one of our RF engineers, have been playing around with several designs for QRP rigs employing some of the new chips hittin' the streets lately. Some are kinda neat (in fact, real neat), but unfortunately available only in surface mounted componetry. Since posting some of the device data sheets on QRP-L, several have contacted me about doing up a new QRP rig as well. So I would say there is certainly some interest.

The NE602 is getting to be a fairly old chip by technology standards; its been around since the late '70's. There's some neat new stuff around. But to be honest, in designing and breadboarding with stuff on this end, it is VERY HARD to beat a chip that does what the 602 does for \$2. So Chuck, if you don't mind me jumping in on your design proposal, let me ditto your request ... and get some good feedback from the netters on what they'd like to see in a rig. Are you all sick of NE602's? Is it that big a deal? Want to use something more exotic and contemporary even if a \$10 chip? If we're gonna design something from the ground up, let's talk features. What would you like to see (I mean besides a tune and volume control obviously). Anti-lock brakes, tinted sun roof, what? What price range? I mean a <\$99 thing, or say \$150-200 for a rig with a better receiver and selectivity?

I'm certainly willing to help and share with thoughts. Doing this for a living, means I at least know what these new components cost and where to get them. There's also some professional packaging techniques that could be applied, etc. all depending on what level of kit building people are interested in. In short, I think its a great idea.

72, Paul NA5N

From owner-qrp-l@netcom.com Tue May 16 05:29:44 1995
Date: Mon, 15 May 1995 23:29:44 -0600 (MDT)
From: Rick Zabrodski <zabrodsk@med.ucalgary.ca>
Subject: Re: Designing OUR OWN rig!
Message-Id: <Pine.SUN.3.91.950515232811.22800B-100000@ume>

Whats wrong with a 602?....I just figured out what they did 6 months ago.....do they make designing "too easy" or are they "out of date"?

Dr. Rick Zabrodski BSc, MD, CCFP(E)	*	VE6GK
Email: zabrodsk@med.ucalgary.ca	*	NorCal 519 ARCI 7650 GQRP 8329
Phone 403-271-5123 Fax 403-225-1276	*	"Power is no substitute for skill"

On Mon, 15 May 1995, Steven Wilson wrote:

> Yes I would like to see something without a 602.
>
>

From owner-qrp-l@netcom.com Tue May 16 06:31:20 1995
Date: Tue, 16 May 1995 07:30:20 +0059 (EDT)
From: howie cahn <wb2cpu@world.std.com>
Subject: Re: Designing OUR OWN rig!
Message-Id: <Pine.3.89.9505160710.A16783-0100000@world.std.com>

On Mon, 15 May 1995, Rick Zabrodski wrote:

> Whats wrong with a 602?....I just figured out what they did 6 months
> ago.....do they make designing "too easy" or are they "out of date"?
>

Hi Dr. Rick --

The major problem with the 602 is that it has relatively poor

intermodulation distortion (IM) characteristics. This is usually represented by the fictitious but useful 3rd-order intercept point. In the case of the 602 it's -15 dBm. A good mixer will have a 3rd-order IP of +10 to +30 dBm, a whole lot better. Bad IM characteristics will produce spurious signals and a raised noise floor. 602's are quite useful for QRP-type equipment but they don't really lend themselves to higher performance receivers.

72/73... howie

wb2cpu@world.std.com

(I'm writing this within 5 minutes of getting up in the morning. Please excuse any typos or gross stupidity.)

From owner-qrp-l@netcom.com Tue May 16 12:05:51 1995
Date: Tue, 16 May 1995 07:05:51 -0500 (EST)
From: David Moody <MOODY@admin.rose-hulman.edu>
Subject: Re: Designing OUR OWN rig!
Message-Id: <01HQK8Z09DIQHTRWYV@ADMIN.Rose-Hulman.EDU>

>How many people would be up to designing the QRP-L lists own
>kit? I think that we could design one hell of a XCVR!
>What do you think? (It has to be something without a NE602! :-)

I would love the idea. We would have a great deal of input from many of the QRP greats. Publish the article and schematic on an FTP site, and away everybody goes. Although, I have found that design by wide area committee can be a real pain in the posterior. You never know, though.

And hey, (not to start a war or anything) just what do you have against the NE602? ;-) :-) :-) (Notice the flame proof (yeah right) smileys) ;-)

72, David Moody, KD8NY, C'mon Field Day

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-----  
David A. Moody           | E-mail: David.Moody@Rose-Hulman.edu  
Admin. Programmer/Analyst | Finger: mgrdam@crux.Rose-Hulman.edu  
Rose-Hulman Inst. of Tech. | Amateur Call: KD8NY (CW QRP) ex-WB9MMD  
Terre Haute, IN USA 47803 | (VMS Rules!!! (but RSTS was fun.))  
Wk Ph: 812.877.8183      |  
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Any facts expressed within belong to everybody.
Any opinions expressed within are my own and are not

necessarily the same as my employer, family, friends, etc.
It is up to you to know the difference.

From owner-qrp-l@netcom.com Tue May 16 12:12:11 1995
Message-Id: <199505161212.IAA02676@jfwhome.funhouse.com>
Subject: Re: Designing OUR OWN rig!
Date: Tue, 16 May 1995 08:12:11 -0400
From: "John F. Woods" <jfw@jfwhome.funhouse.com>

> Whats wrong with a 602?....I just figured out what they did 6 months
> ago.....do they make designing "too easy" or are they "out of date"?

They've got poor dynamic range, so they aren't the best possible receiver
mixer, and way too low a 3rd order intercept for a transmit mixer (it's
more difficult than it needs to be to clean up the output when fed with
a VFO at the usual levels).

From owner-qrp-l@netcom.com Tue May 16 12:28:32 1995
Date: Tue, 16 May 1995 05:28:32 -0700 (PDT)
From: Steven Wilson <randyw@crl.com>
Subject: Re: Designing OUR OWN rig!
Message-Id: <Pine.SUN.3.91.950516052741.3895B-100000@crl4.crl.com>

Paul you will want to take a look at Analog Devices AD607. Lot
of neat things out there due to the Wireless Boom. de stan ak0b

From owner-qrp-l@netcom.com Tue May 16 13:36:18 1995
From: rohrwerk@netcom.com (John Seboldt)
Message-Id: <199505161336.GAA05737@netcom8.netcom.com>
Subject: Re: Designing OUR OWN rig!
Date: Tue, 16 May 1995 06:36:18 -0700 (PDT)

> Whats wrong with a 602?....I just figured out what they did 6 months
> ago.....do they make designing "too easy" or are they "out of date"?

>

> Dr. Rick Zabrodski BSc, MD, CCFP(E) * VE6GK
> Email: zabrodsk@med.ucalgary.ca * NorCal 519 ARCI 7650 GQRP 8329
> Phone 403-271-5123 Fax 403-225-1276 * "Power is no substitute for skill"

Just that they have pretty low dynamic range. Which is expected for the low

current they deal with.

: John Seboldt rohrwerk@netcom.com / CW: It don't mean a thing
: Amateur radio K0JD... / if it ain't got that swing!
: Church of the Annunciation, / Di dah, di dah, di dah, di dah...
: Minneapolis / (sorry, Duke!)

From owner-qrp-l@netcom.com Tue May 16 13:58:49 1995
Date: Tue, 16 May 1995 08:58:49 -0500 (CDT)
From: Kevin Anderson <anderson@ncrsun7.ncr.usace.army.mil>
Subject: Re: Designing OUR OWN rig!
Message-Id: <Pine.SUN.3.91.950516085628.2627A-1000000@ncrsun7>

My brain must be foggy, but didn't we start all of this a year ago in wanting to design the INET rig? Is this an attempt to start that effort up again? I seem to recall the INET rig threads quickly heading the way of a super-duper radio with every widget possible being designed into it.

Cheers/73. Kevin, KB9IUA E E
On Tue, 16 May 1995, David Moody wrote:

>
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> >kit? I think that we could design one hell of a XCVR!
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> And hey, (not to start a war or anything) just what do you have against
> the NE602? ;-) :-) :-) (Notice the flame proof (yeah right) smileys) ;-)
>

Kevin L. Anderson, CENCR-PD-W, U.S. Army Corps of Engineers
Rock Island District Office, Planning Div.-Waterway Systems
Rock Island, Illinois 61204-2004, USA phone:(309) 794-5586
e-mail: anderson@ncrsun1.ncr.usace.army.mil

Opinions expressed here are my own and do not represent the
U.S. Army Corps of Engineers or the Federal Government.

From owner-qrp-l@netcom.com Tue May 16 14:15:14 1995
Date: Tue, 16 May 1995 08:15:14 -0600
From: Paul Harden <pharden@aoc.nrao.edu>
Message-Id: <199505161415.IAA25520@zia.aoc.nrao.edu>
Subject: Re: Designing OUR OWN rig!

ADAM,
Ooops, sorry about confusing you with Chuck Adams. A little
internet laziness ... glanced at the email address and only saw
the "adam" part.

None-the-less, I still think you have started a good forum to find
out how much interest there is on designing our own rig.

72, Paul NA5N (just call me "Harold")

From owner-qrp-l@netcom.com Tue May 16 14:55:46 1995
Date: Tue, 16 May 1995 10:55:46 -0400
From: teda@meaddata.com (Ted Albert)
Message-Id: <9505161455.AA15687@rain.meaddata.com>
Subject: Re: Designing OUR OWN rig!

> >How many people would be up to designing the QRP-L lists own
> >kit? I think that we could design one hell of a XCVR!
> >What do you think? (It has to be something without a NE602! :-)
>
> I would love the idea. We would have a great deal of input from many of
> the QRP greats. Publish the article and schematic on an FTP site, and
> away everybody goes. Although, I have found that design by wide area
> committee can be a real pain in the posterior. You never know, though.
>
> And hey, (not to start a war or anything) just what do you have against
> the NE602? ;-) :-) :-) (Notice the flame proof (yeah right) smileys) ;-)
>
> 72, David Moody, KD8NY, C'mon Field Day

Well, this project was started months ago and then quietly died down, I
think. There were some schematics posted to an FTP site and some circuit
descriptions. The project was known as the INET rig.

The INET rig actually exists in another flavor. It is called the Cascade
from Norcal. If you talk with Doug, KI6DS, or read his posts, the rig

was conceived during a car trip, and then everything from the design to parts procurement logistics were handled via e-mail on the net. I spent a pleasant half-hour on the last day of Dayton talking with Doug about the Cascade and how the Internet played a major part in the rig happening so quickly. It was a very interesting conversation.

72 de Ted, KF8EE

From owner-qrp-l@netcom.com Tue May 16 15:04:44 1995
Message-Id: <199505161504.LAA03178@jfwhome.funhouse.com>
Subject: Re: Designing OUR OWN rig!
Date: Tue, 16 May 1995 11:04:44 -0400
From: "John F. Woods" <jfw@jfwhome.funhouse.com>

> 602s are useful in
> QRP-type equipment but they don't really lend themselves to higher
> performance receivers.

I first read this as "602s are useful in QRM-type equipment" which was the whole point, I guess. :-)

From owner-qrp-l@netcom.com Tue May 16 16:49:01 1995
Date: Tue, 16 May 1995 11:49:01 -0500 (EST)
From: David Moody <MOODY@admin.rose-hulman.edu>
Subject: Re: Designing OUR OWN rig!
Message-Id: <01HQKIV30K00HTRWYV@ADMIN.Rose-Hulman.EDU>

IN%"anderson@ncrsun7.ncr.usace.army.mil" "Kevin Anderson" writes:
>My brain must be foggy, but didn't we start all of this a year
>ago in wanting to design the INET rig? Is this an attempt
>to start that effort up again? I seem to recall the INET
>rig threads quickly heading the way of a super-duper radio
>with every widget possible being designed into it.

Well, I joined the list last August and I think that there was something along those lines. Or at least I think it was in the dying stages. Maybe more of a KISS approach is in order. Or make it so we can design add ons to enhance the whole thing. A few basic building blocks here, a few more there. Gee, almost like the Kanga Oner. Instead of the Kanga VFO, maybe use a DigiVFO. Add on some kind of audio filtering. Change the rcvr to a superhet (yet keep it just as small :)). All kinds of things that can be done here. Of course at some point, you can't really call it a Oner anymore, but that's OK.

The Kanga Oner was used only as an example here because I plan on doing some of those things to mine. Ridiculous, maybe, but fun!!! And isn't that what it is all about?

My two milliwatts worth...

72, David Moody, KD8NY, C'mon Field Day

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-----
David A. Moody          | E-mail: David.Moody@Rose-Hulman.edu
Admin. Programmer/Analyst | Finger: mgrdam@crux.Rose-Hulman.edu
Rose-Hulman Inst. of Tech. | Amateur Call: KD8NY (CW QRP) ex-WB9MMD
Terre Haute, IN  USA  47803 | (VMS Rules!!! (but RSTS was fun.))
Wk Ph:  812.877.8183      |
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Any facts expressed within belong to everybody.
Any opinions expressed within are my own and are not
necessarily the same as my employer, family, friends, etc.
It is up to you to know the difference.

From owner-qrp-l@netcom.com Tue May 16 17:01:42 1995
Message-Id: <199505161704.KAA19938@mail2.netcom.com>
Subject: Re: Designing OUR OWN rig!
Date: Tue, 16 May 95 10:01:42 PDT
From: "Stan Goldstein, N6ULU" <stan@cruzio.com>

Hi Paul, I'm certainly interested in a high performance rig,
even it means more dough.
The features I like are ;
1 rit & xit
2 rf and volume control
3 solid front end
4 variable (or multiple choice) IF filtering
5 QSK
6 5 watts out (life is too short for QRPp)

I'm not an engineer, so cant help at the design
level, but would be willing to assist in other ways
if I can be of service.

--

72.25 (I still use high power when I need it)
Stan Goldstein , N6ULU

From owner-qrp-l@netcom.com Tue May 16 17:17:10 1995
Date: Tue, 16 May 1995 10:17:10 -0700 (PDT)
From: Alan Kaul <kaul@netcom.com>
Subject: Re: Designing OUR OWN rig!
Message-Id: <Pine.3.89.9505161048.A13867-0100000@netcom>

I, for one, think it's time we started thinking about a few ''state of the art'' features. The one I like most involves creating a little box that is controlled by a computer ----- i.e., the box itself only has antenna and power terminals AND a 9-or-25 pin connector for the computer serial port. Computer controls frequency, volume, RF-gain, power, etc (or as many of those as is practical). I don't want another cute-little-radio which is quite similar to most of the other cute-little-radios already in the shack (I have C-L-R's for 40, 30, 20, 17, 15, 10). I want a different-kind-of-radio with or without a 602!
73/72 de Alan

[<Alan Kaul, W6RCL>] kaul@netcom.com

From owner-qrp-l@netcom.com Tue May 16 17:41:35 1995
Date: Tue, 16 May 95 13:41:35 EDT
From: mitchell@dtc.kodak.com (Brad Mitchel)
Message-Id: <9505161741.AA17553@dzx57d.dtc.kodak.com>
Subject: RE: Designing OUR own rig!

Ok guys, this dicussion is when I left off last time when I bailed out of this list server due to lack of time.
Has there been that much change over that nobody remembers..
Well, I will say the same thing I said last time.
If you guys really thin you could design a rig this way, over e-mail, than you are a better lot than I .. ask around what happened to the last rig designed on here..
I'll bet you'll get responses like, well, I woke up and realized I had a real job..
Then the project fizzled. I'm not saying you cannot organize good ideas, and mods, but a full rig design is a big undertaking, and unless someone specifically takes ownership, then it's goose is cooked.
73 Brad WB8YGG

From owner-qrp-l@netcom.com Tue May 16 22:13:19 1995
Message-Id: <9505162212.AA18025@garnet.inel.gov>
Date: Tue, 16 May 1995 16:13:19 -0600
From: LVE1@inel.gov (Larry East)
Subject: Re: Designing OUR OWN rig!

Today "[<Alan Kaul, W6RCL>] kaul@netcom.com" wrote:

>I, for one, think it's time we started thinking about a few 'state of
>the art' features. The one I like most involves creating a little box
>that is controlled by a computer ----- i.e., the box itself only has
>antenna and power terminals AND a 9-or-25 pin connector for the computer
>serial port. Computer controls frequency, volume, RF-gain, power, etc
>(or as many of those as is practical). I don't want
>another cute-little-radio which is quite similar to most of the other
>cute-little-radios already in the shack (I have C-L-R's for 40, 30, 20,
>17, 15, 10). I want a different-kind-of-radio with or without a 602!
>73/72 de Alan

>
Geezzz -- a \$50 radio controlled by a \$1000 computer! What WILL they think
of next...?? Well I, for one, still prefer to turn knobs rather than bang
on a keyboard (or fiddle with an electronic rodent) when operating a radio!

To me, "state of the art" features would include programmable DSP filtering,
PPL stabilized VFO, digital speech processing, programmable keyer with a
message memory, digital SWR and peak power indication, and stuff like that.
But now we're getting out of the \$100 range...

72, Larry W1HUE/7
LVE1@inel.gov

PS -- I am NOT anti-computer; I actually program the damn things for a
living. But I do believe some folks get a bit carried away with them...

From owner-qrp-l@netcom.com Wed May 17 01:34:17 1995
Date: Tue, 16 May 1995 21:34:17 -0400
Message-Id: <95051621341690@sescva.esc.edu>
From: pcalcand@sescva.esc.edu (PETER CALCANDY)
Subject: Designing OUR OWN rig!

If the I-net group all participated in designing our own rig, it would
look like a CAMEL!!!

Regards,
N2KPY

From owner-qrp-1@netcom.com Tue May 16 21:07:48 1995
From: JCoote@aol.com
Date: Tue, 16 May 1995 17:07:48 -0400
Message-Id: <950516170747_120849599@aol.com>
Subject: Digital QRP Experiences

People may wonder if digital (Packet, PACTOR, GTOR, AMTOR) communications will work at the QRP level. I thought I'd throw in my observations:

Accidental Packet QRP on 17 meters:

For a few years I've operated a packet gateway on 18.107 Mhz. The packet gateway provided connections between a local VHF packet channel (144.91 MHz) and HF. One day I'd used the radio (QRP-modified IC-735) at 3 watts and forgot to reset the power to QRO. I forgot all about it for three weeks and only one user on the 17 meter side complained about "conditions" to my mailbox.

160 Meter TOR vs Packet Tests:

I was interested in comparing HF packet (well, MF packet technically!), PACTOR and Kantronic's new GTOR mode. The transceivers were IC-735's, both at 3 watts with the QRP mod. The TNCs were Kantronics KAM's, version 7.1

The fixed station used a B&W AC 1.8-30, an all-band Vee-like antenna with high-angle properties on the lowest bands. The fixed station was located in my City EOC. The mobile station was mounted in a full-size van. An Icom AH-2 tuner was used on the inner wall of the van, right at the base of a Mobile Mark custom helical whip for 1990 KHz. I drove around the local freeway and a few surface streets during daylight hours in the summer. I found that GTOR performed the best, followed by PACTOR... packet was a slow runner up and sometimes would retry out (or not connect). I achieved no great 160 meter QRP mobile DX records, but the comparison between the modes interested me. 160, 80, and 40 were also of interest to me for "high-angle" disaster communications.

The 160-190 KHz Experimenter's Band:

(For you list police, this is not a ham band... arrest me!) It is legal to run 1 watt and any mode on this band. A few years back, I copied the RTTY and packet signals from WD4PLI's 183 kHz station, about 17 miles away.

Again, no great DX record but it was interesting to see 1-watt data signals (pure groundwave signals) punch through the high noise level on this band.

(Those LOWFERS* ought to get with it and set up a chain of packet nodes).

*Low Frequency Experimental Radio

QRP works with "digital" too.

72, Jay WB6AAM (ARCI 5050)

jcoote@aol.com
WB6AAM@K6VE.#SOCA.CA.USA.NA

From owner-qrp-l@netcom.com Tue May 16 12:28:19 1995
Date: Tue, 16 May 1995 08:28:19 -0400 (EDT)
From: prvalko <prvalko@oakland.edu>
Subject: Re: For Sale: NorCal 40, A&A 20m
Message-Id: <Pine.3.89.9505160845.B22379-0100000@saturn.acs.oakland.edu>

On Mon, 15 May 1995 n6xi@tss.com wrote:

>
> XYL says Too Many QRP Rigs!
>

Hmmm... Reminds me of something I overheard on 75M phone...

"My XYL said it was either her or the ham rig.... OVER"

:-) 73! =paul= wb8zjl

From owner-qrp-l@netcom.com Wed May 17 03:31:35 1995
Date: Tue, 16 May 1995 20:31:35 -0700 (PDT)
From: patrick cook <kb0oxd@netcom.com>
Subject: Re: For Sale: NorCal 40, A&A 20m
Message-Id: <Pine.3.89.9505162043.A20670-0100000@netcom7>

Hi QRP-L:

On Tue, 16 May 1995, prvalko wrote:

> On Mon, 15 May 1995 n6xi@tss.com wrote:
>
> >
> > XYL says Too Many QRP Rigs!
> >
>
> Hmmm... Reminds me of something I overheard on 75M phone...
>
> "My XYL said it was either her or the ham rig.... OVER"

ROTFL!!!!

73's for now, my friends!

DE KB00XD

From owner-qrp-l@netcom.com Tue May 16 09:41:00 1995
From: Johnson_Dan@AAC.COM
Message-Id: <9505160900.22624.aa@SMROUTER.AAC.COM>
Date: Tue, 16 May 95 01:41:00 PST
Subject: Re: HB cases (P.S.)

Content-Type: text/plain; charset=US-ASCII

Lest I have created a misunderstanding in my post on homebrewing cases, it is **not** implied that those-who-don't are less-than-skillful-QRPers.

To the contrary, my intent was to invite you to look past your perceived limitations and do "it" anyway **if** what stops you is solely the inability to do a perfect job. This also applies to building accessories, rigs, kits, even hooking together commercial gear in new ways. I say this as one of the least-skilled QRPers around (but enjoying the heck out of the slow ascent).

Nothing ventured, nothing lost; something attempted, something gained.

73 ES VY GL DE KC4EWT
Johnson_Dan@aac.com (Herndon VA)

From owner-qrp-l@netcom.com Tue May 16 07:29:00 1995
From: Johnson_Dan@AAC.COM
Message-Id: <9505160642.22624.aa@SMROUTER.AAC.COM>
Date: Mon, 15 May 95 23:29:00 PST
Subject: HB cases (was: NNIG Mark xx Rigs)

Content-Type: text/plain; charset=US-ASCII

On 5/15/95 at 10:57 PM, Bob <rgobrick@public.compuser.com> wrote:

> Did you order the new prepunched, prepainted and prelabelled case - it's
> a beauty and will help you finish your project sooner (PS I hate building
> cases and my kits usually sit on the bench until the case gets made - in
> my case months...

Now cases are one thing that I enjoy designing, partly because I'm not yet comfortably experienced with designing the guts. Being mostly thumbs and feeling driven to sleep on many miniscule design decisions, it takes me forever. Once finished, though, I can sit back and, with the pride that only a "parent" can have, marvel at the beautiful, semi-handcrafted creation, gazing with affection at ugly dymo labels and effortlessly overlooking slight slips of punch and drill. Joy from a junky box.

The real payoff comes later. Not having silly silk-screened labels nor flawless finish to preserve, modifications come easily and without hesitation. New switch? Punch! Different label? Rip! Who needs new rigs when you can change the ones you got?

Homebrewed cases breed change.
Change breeds mistakes.
Mistakes breed experience.
Skill comes from experience.
Power is no substitute for skill.

With apologies to W1FMR :-) and 72 to all de KC4EWT
Johnson_Dan@aac.com (Herndon VA)

From owner-qrp-1@netcom.com Wed May 17 02:05:55 1995
Message-Id: <9505170203.AA00335@sun>
Date: Tue, 16 May 1995 22:05:55 -0400
From: jokortge@sun.lisp.com (Jim Kortge, NU8N)
Subject: Re: Hexfet & Power FET finals.. thoughts?

Jay Coote wrote...

>
>Does anyone have comments on using n-channel HEXFETs such as the common
>IRF-511 for the final in a 1-5 watt QRP transmitter for the MF/HF bands?
>
>
Jay, I have an amplifier that I designed using a pair of MTP3055 MOSFET's. It easily puts out 12-15 watts cw on 40 and 17 meters. I am running it class AB2 in SSB operation driving it with one of my Mizuho rigs (about 2 watts output) running on the bike.

At Dayton, Doug, KI6DS, and I talked about refining the design and maybe making a kit available via NorCal. Lots of work to do before a real kit exists. In the meantime, I could send you a schematic of the design that I am using, and you could cobble one together, with some effort. Let me know! :>)

I also tried other MOSFET's such as IRF510's 520's etc and didn't find that

I could get as much power out of them, as I could the MTP3055.
Also, I have the PSPICE model for that device (compliments of Motorola)
which makes modelling the circuits in PSPICE a lot easier.

That's my \$.02 worth.....good luck and have fun!!!

72/73.....Jim, NU8N

Jim Kortge, NU8N		Bicycle Mobile Hams
jokortge@lisp.com	__o	of America
Fenton, MI	_'\<,	Mizuho 17m/40m QRP SSB
.....	(*)/(*)	

From owner-qrp-l@netcom.com Tue May 16 13:43:02 1995
Date: Tue, 16 May 1995 09:43:02 -0400
From: William McFadden <wmcfadde@oucsace.cs.ohiou.edu>
Message-Id: <199505161343.JAA28297@oucsace.cs.ohiou.edu>
Subject: How to find ARCI number?

Greetings fellow QRPers.

I joined the QRP ARCI at Dayton this year, and, unfortunately, they weren't
set up to give numbers. I've been expecting a piece of mail from them, but
haven't received anything. How do I learn what my number is?

Some background about me, I'm relatively new to QRP. I have an ICOM 735
which I've been running at 5 watts, an HW-8, and a Spider on 30m. This
past Sunday I worked Croatia on 20m and Slovakia on 30m with the ICOM,
and the previous Sunday I worked Cuba on 20m with the HW-8. I'm planning on
trying to get QRP ARCI WAS, and I have one state confirmed--Texas on 30m.

Eric McFadden WD8RIF
Athens OH

wmcfadde@ace.cs.ohiou.edu

From owner-qrp-l@netcom.com Tue May 16 15:30:31 1995
Date: Tue, 16 May 1995 11:30:31 -0400
From: William McFadden <wmcfadde@oucsace.cs.ohiou.edu>
Message-Id: <199505161530.LAA15244@oucsace.cs.ohiou.edu>
Subject: How to find QRP ARCI number?

Hello fellow QRPers!

I am relatively new to QRP, and joined the QRP ARCI at the Dayton Hamvention. Unfortunately, they weren't set up to issue numbers there, and I've not yet received any mail from them. I believe some of the QRP ARCI board members are on this list; can one of them provide my number?

Background on me: I'm fairly new to QRP. My main rig is an ICOM 735, adjusted so it'll transmit at 5 watts. I also have an unmodified HW-8 and a just-completed Spider for 30m. The HW-8 is my "travel rig", although I think I won't get to travel much this summer. This past Sunday I worked Croatia on 20m and Slovakia on 30m with the 735, both at 5 watts. The previous Sunday I worked Cuba on 20m with the HW-8. The antennas at home are a dipole cut for 20m, a shortened dipole for 160m, and a 135' dipole fed with ladder line for the other bands, all at about 30'.

Tnx, 73, es 72

W. Eric McFadden WD8RIF
Athens OH

From owner-qrp-l@netcom.com Tue May 16 20:00:43 1995
Date: Tue, 16 May 1995 13:00:43 -0700 (MST)
From: "Mark E. Monninger" <markem@PrimeNet.Com>
Subject: How to join NORCAL?
Message-Id: <Pine.BSI.3.91.950516125607.19102B-100000@usr1.primenet.com>

I've been procrastinating on joining NORCAL and now that the Cascade orders are being taken, I really need to do it. What's the procedure for joining? Can I do it via email? Is there an application I need to fill out? Where can I get one? Can I send in my membership app and Cascade order at the same time? Dontcha just hate people who only ask questions?

Thanks & 73.... Mark AA7TA

From owner-qrp-l@netcom.com Tue May 16 01:29:12 1995
From: N8DHT@aol.com
Date: Mon, 15 May 1995 21:29:12 -0400
Message-Id: <950515190632_119698253@aol.com>
Subject: In the Quarterly's Mailbox

I received the following mail for the Quarterly (and qrp-l is a more efficient solution):

"Dear Sirs,
SOS!

I need 2N4126 for the repair of my Racal RA 6790/GM receiver.
I will send you MPF-102 or NEC 2SC1871A TR in lieu of money.
Please help me. Thank you.

Dong-Hyun Cho, HL2DDK
QRP-ARCI #7042
Biology Dept
Kang Won National Univ.
Chun Chon 200-701
Korea (South) "

If someone wants to help word directly with him. Do not reply to the
Quarterly (or me).

If msgs like this are inappropriate for qrp-l please let me know. In that
case it will be both the first and last of its type.

72/73

Myron

From owner-qrp-l@netcom.com Tue May 16 12:46:15 1995
From: Mike.Czuhajewski@hambbs.wb3ffv.ampr.org (Mike Czuhajewski)
Subject: Re: In the Quarterly's Mailbox
Date: Tue, 16 May 95 07:46:15 EST5EDT
Message-Id: <1995May16.074615.22157@wb3ffv.ampr.org>

I don't have any problem with occasional calls for help like the recent
one by HL2DDK; he is, after all, a QRPer, and as you said yourself,
QRP-L is a more efficient means of helping than printing his request in
the QRP Quarterly. (Now if someone asks for help with bald spots on
their lawn or something like that, even if they're a QRPer I'll still
drive to their house and chop their telephone cable in half :-).)

BTW, I go back several years with HL2DDK. He is a PhD at the college,
he's also a member of GQRP, and an avid homebrewer. (And he even sent
me a box of MPF102's once, for distribution to local QRPers.) He also
has almost every issue of QST since January 1950, as well as 95% of the
issues of Ham Radio magazine. I can personally verify that, since I'm
the one who sent every last one of them to him! This was back in
1992/1993, a year and a half project, with him sending me the money to
have them sent over via surface mail, printed matter rate, a category
which has a weight limit of 4 pounds per item, so it took quite some
time. Even at that rate, the lowest available, it cost a bit of

money--approximately \$925! Now THAT'S a dedicated QRPer and homebrewer!

Obligatory QRP comment: I'm almost thru with the Idea Exchange column for the July issue of the QRP Quarterly, and it's 11 pages, with several pages of backlog for the next issue already. One of those backlogged items will be a resurrecting of an item I submitted to the column while W3TS was still writing it--using an old mechanical UHF TV tuner (not the electronic kind) for a VFO. Those are the types with a detent on them; remove the ball bearing for the detent (a single screw removes it), and you have a small, 3 section variable cap with built in dial drive, built like a tank, and perfect for making VFOs. You just have to remove some extraneous parts. The down side is that the plates have an odd shape, so tuning is nonlinear, but you can mitigate that by only using part of its range for your VFO.

The best ones seem to be made by Alps, and are my favorite. A problem with some of the others is that occasionally the inductor, which is simply a strip of metal at this frequency range, is an integral part of the capacitor assembly and cannot be removed without ruining the cap. In the Alps, and perhaps others, the strip is still there--an inductor from the stator of the cap to ground, to the frame on the far side of the chassis--but there is a support post right at the cap so the strip can be *carefully* snipped out.

A future project will be building an entire transmitter into the tuner box. Separation between the VFO and amplifier will be fairly simple; the cap has 3 sections, in 3 cavities, and I'll only use one or two of them, leaving the section in the 3rd cavity unused, and put the transmitter there.

73 and Queue Our Pea DE WA8MCQ

--

Mike Czuhajewski, user of the UniBoard System @ wb3ffv.ampr.org
E-Mail: Mike.Czuhajewski@hambbs.wb3ffv.ampr.org
The WB3FFV Amateur Radio BBS - Located in Baltimore, Maryland USA
Supporting the Amateur Radio Hobby, and TCP/IP InterNetworking

From owner-qrp-l@netcom.com Tue May 16 01:40:19 1995
From: rarland@epix.net
Date: Mon, 15 May 1995 21:40:19 -0400 (EDT)
Subject: Re: made by MFJ.
Message-Id: <Pine.SUN.3.91.950515213935.3130B-100000@peach.epix.net>

Just for the record....the 9020 loaned to the ARCI hospitality suite was in 1992 NOT 1994....typo....sorry.

72 rich

From owner-qrp-l@netcom.com Wed May 17 00:05:19 1995
Message-Id: <199505170122.WAA03140@public.compuserc.nf.ca>
Date: Wed, 17 May 1995 01:05:19 +0100
From: rgobrick@public.compuserc.nf.ca (Robert J. Gobrick)
Subject: Modest Proposal

QRP-L Gang,

I've been thinking about this for a while and I figured I'd better try posting it before I leave Friday for a vacation and minimum access to my daily qrp news.

A MODEST PROPOSAL

by Bob Gobrick V01DRB/WA6ERB

I've been thinking lately about a surface mounted component project.

I've been thinking lately about a qrp-l project.

I've been thinking lately about a joint qrp-l project with a local QRP club (a club maybe like the Colorado QRP Club).

My modest proposal:

1. Let's brainstorm first on if a surface mounted component project is of interest to any of you adventurous folks out there. I've been getting some public and private postings that says there is an interest.
2. Let's make a quick FAQ sheet on reading resources on SMC projects - the one that comes to mind to me is Paul W1CFI SMC 80 meter xcvr in the Jan 94 QQ. Are there others out there (QEX, COMM Quarterly, SPRAT). We need someone to catalog this.
3. Let's brainstorm and pick a "first time" SMC ham project. I for one don't want to spend \$100 on my first SMC project - what if my magnifying glass breaks. Also some rf components may not be available in SMC's (SMC toroid - they would be hell to wind - ok I know they make static ring mixers). I think for a "first-time" project maybe we need to start with something non-rf. SMC Keyer? Tiny SMC audio filter with amp? SMC SCAF filter? SMC converter to listen/transmit on 6 meters with a cb rig? What I think we need is a simple "first-time" project which the average (we qrpers are far

from average) kit builder could succeed at. Any thoughts out there.

4. Once we pick the design we need some design and breadboarding (what do you call a SMC pc board?) I think we can get some volunteers here on the qrp-l.

5. And finally - here is the twist - we need to find a club that would like to jointly sponsor this project by acting as the "kitter" We need a club who, like the QRP club of New England, Norcal QRP club, Northwest QRP club is ready to come out with a club kit and gain worldwide QRP notariety. We need a local club, because they can gather a few members with tweezers and "bag" up all the SMC caps, resistors, ic's etc into kits - say a quantity of 100. I keep thinking the Colorado QRP club is ripe for this.

6. And finally we need a pseudo project manager to keep this all going. I'll certainly help with that role - but just to warn folks I'm on vacation the next two weeks and I may not have time to think... ;-)

OK can we get some volunteers for some of these activites? Doug of Norcal said that he hopes to get an SMC how-to-do-it article shortly from a qrp'er that he collared at Dayton. That's a great start. Maybe some of the G-QRP gang can give us a hand since I think SPRAT had some past SMC articles (and a company that supplied kits at one time). Maybe the New England gang can tap Paul W1CFI one more time to write some SMC material. Maybe we need a few tutorials from some of the top-notch people on this list.

OK that's my modest proposal - I am not asking for your first born or any other Jonathan Swift type wants.

What do you guys and gals think - should we give it a go. Again let's start with something easy and let's get the help of a local club to coordinate things - I think the reason why the last QRP-L group project didn't get launched was because it may have become too ambitious. Please make your posts public for the time being. And as I mentioned I am going to be out of pocket starting on Friday this week so if you post to me I may not be able to anser until I'm back and download the zillion emails (where is that digest.....)

73/72 and let's have some fun before my eyesight goes.. 8-)

Bob V01DRB/WA6ERB

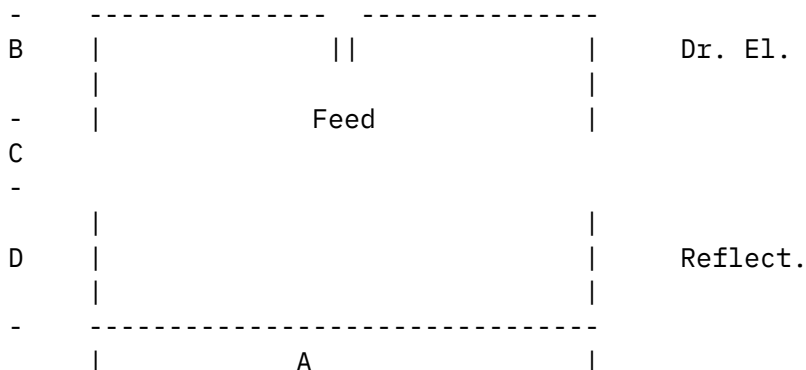
Bob Gobrick - V01DRB/WA6ERB/VE2DRB - Newfoundland, Canada
QRPer Galore - ARCI, GQRP, NORCAL, NEQRP, COQRP, MIQRP, NWQRP

Internet: rgobrick@public.compusult.nf.ca
bgobrick@terra.nl.net.nf.ca

Compuserve: 70466.1405@compuserve.com

From owner-qrp-1@netcom.com Tue May 16 12:35:10 1995
Date: Tue, 16 May 1995 07:35:10 -0500 (EST)
From: cebik@UTKVX.UTCC.UTK.EDU
Subject: more on Moxon rectangles
Message-Id: <Pine.3.89.9505160706.A543422504-01000000@utkvx.utk.edu>

The Moxon rectangle has drawn some attention since my notice of a 10 MHz model on this list. It is a wire antenna that can be fix-mounted or rotated. It is directional with about the gain of a 2-element Yagi (6 dBi in free space) and has an outstanding f-b ratio (>40 dB in free space), with a very broad frontal lobe (-3dB beamwidth =3D 70 degrees, usable beamwidth =3D nearly 180 degrees forward). It looks (crudely drawn) sort of like this:



Here is a table of dimensions for the Moxon rectangle for 40 through 10 meters. All of the antennas exhibit feedpoint impedances between about 56 and 58 =EA, a close match to the standard amateur 50-=EA coaxial cable. Fr=ee space gain and front-to-back ratio are consistent for all the models, averaging 5.8 dBi and greater than 32 dB in free space, respectively. All the models use #14 copper wire, although the various factors that contribute to the Moxon pattern tend to cancel out as wire size increases.=20 Hence, a tubing model will have almost identical dimensions to a thin wire model, but exhibit a broader SWR bandwidth. The models were constructed on EZNEC, a NEC-2 implementation by W7EL.

Band	Design	Dimension (feet)
------	--------	------------------

	Frequency (MHz)	A	B	C	D
10	28.50	12.44	1.94	0.41	2.41
12	24.94	14.22	2.22	0.46	2.76
15	21.20	16.72	2.63	0.52	3.25
17	18.12	19.56	3.10	0.59	3.80
20	14.17	25.00	4.00	0.72	4.85
30	10.12	35.00	5.60	1.00	6.80
40	7.15	49.56	8.01	1.33	9.63

At heights below 1/2 wavelength, the front-to-back ratio will deteriorate somewhat, but usable values can be obtained. The bandwidth for 2:1 SWR is only about 100 KHz on 40, but is full band above 40. For 30 and up, the front-to-back ratio is better than 15 dB across the band. for more details on the design and its evolution from the VK2ABQ square, see the current issue of Communications Quarterly.

-73-
LB, W4RNL

From owner-qrp-l@netcom.com Tue May 16 21:32:06 1995
 Message-Id: <MAILQUEUE-101.950516173206.448@rcadmin.nov.add.bn1.gov>
 From: "Nick Franco - KF2PH" <NICKF@rcadmin.nov.add.bn1.gov>
 Date: Tue, 16 May 1995 17:32:06 EDT
 Subject: NE-30-40

Hey Gang,

Was looking at the Nov. 1994 QST describing Dave's 40-40 and 30-40. Was thinking of buying the pc board and making this version of the rig. Any reason why I shouldn't??? Looks like it's about my speed (slow). I know you all have been discussing the SWL-30 vs 30-40 etc. Give me some advice here.

72/73
Nick

 Nick Franco - RHIC Computer/Network Support

Building 1005 2nd Floor Rm. 201
UPTON, N.Y. 11973-5000 U.S.A.
tel:(516)282-5467 fax:(516)282-3674

Ham Call: KF2PH QRP-NE # 349

From owner-qrp-1@netcom.com Tue May 16 03:41:41 1995
From: AA5BANANA@aol.com
Date: Mon, 15 May 1995 23:41:41 -0400
Message-Id: <950515223428_119982715@aol.com>
Subject: NorCal Sierra?

After an absence of several months, I'm back here on the qrp reflector looking for advice on a good backpacking radio for the summer. Based on things I've read recently, I had my heart set on the NorCal Sierra -- would've been nice to have 20 meters during the day and 40 at night. But when I sent away for literature and ordering info, I found that the Sierra won't be available until Fall.

Anyone have one of these (built or not) that they might want to sell? Or do you have recommendations for an alternative?

-Bruce AA5B
AA5Banana@aol.com

From owner-qrp-1@netcom.com Tue May 16 10:02:10 1995
From: PB13128@deere.com
Message-Id: <DACDXX21.PB13128.863902100095136FDACDXX21@TCP30.DX.DEERE.COM>
Date: 16 May 1995 10:02:10 GMT
Subject: NOTE 05/16/95 10:02:37

Subject: re: Designing our own

What I'd like--single band, 14 MHz, covering entire cw portion. Good sensitivity and selectivity, variable dsp filtering, 2 VFO's with digital readout, 5 watt maximum output with full QSK T/R switching. Computer control ala Icom protocol would be handy since the radio would be very compatible with the CT or NA contest programs. What did I leave out? In short I want the ideal QRP single band contest radio. Surface mount technology would probably mean lower overall current draw for field/portable expedition operations.

Pete, NN9K

From owner-qrp-l@netcom.com Tue May 16 15:59:31 1995
Message-Id: <9505161558.AA16593@us1rnc.bb.dec.com>
Date: Tue, 16 May 95 11:59:31 EDT
From: "Dennis, K1YPP, 226-5982" <blanchard@nac.enet.dec.com>
Subject: Other lists?

I suspect there must be other "lists" of amateur related topics? For example, antennas, homebrew, surplus etc. Where would one find such information?

Thanks

Dennis, K1YPP

From owner-qrp-l@netcom.com Wed May 17 04:19:57 1995
Date: Tue, 16 May 1995 21:19:57 -0700 (PDT)
From: patrick cook <kb0oxd@netcom.com>
Subject: Re: Other lists?
Message-Id: <Pine.3.89.9505162151.A20670-0100000@netcom7>

Hello QRP-L:

On Tue, 16 May 1995, Dennis, K1YPP, 226-5982 wrote:

> I suspect there must be other "lists" of amateur related topics? For example,
> antennas, homebrew, surplus etc. Where would one find such information?

Dennis: I am a member of the BMHA (Bicycle Hams of America), and they have a listserver which would be of great interest to QRPers such as yourself.

The listserver is called the bikeham listserver. On the listserver, a number of topics are discussed, including QRP operation (since most bicycles today aren't built to handle gigantic rigs <Hi, Hi>).

Rather than my going into how to subscribe to the listserver here, if you (or anyone else) would like information on how to subscribe, please email me DIRECT at the Internet address listed below.

73's for now, my friends!

DE KB00XD

Internet: kb0oxd@netcom.com

From owner-qrp-1@netcom.com Tue May 16 14:16:32 1995
Date: Tue, 16 May 95 09:16:32 EST
From: John Foote <footej@hn.va.nec.com>
Message-Id: <9504168006.AA800640992@bills.hn.va.nec.com>
Subject: Re: PEP measurement

At the risk of starting something, and perhaps showing how long I've been away from this business, don't get confused about RMS power.

RMS power has no direct relationship to any but a sinisoidal waveform. It is the power under an ac waveform that is the equivalent power one would find under a DC waveform (a constant voltage and current).

DC power = $E \times I$ both figures being DC. It's the area under the waveform. What is the size of an AC waveform that is sinisoidal that has the same power (produces the same heating in a resistor) as a given DC waveform? If the waveform is a sine wave (or cosine wave) then find the peak voltage (the height) and multiply it by .707. For the purposes of finding the power dissapated in a resistive load, this (also the RMS - route mean square) can be squared and divided by the resistance R to find the power lost in the resistive load.

If the wavefrorm is NOT a sine wave then all bets are off. To find the power one must find the area under the irregular waveform, through integration. Taking the peak voltage of an irregular waveform and multiplying by .707 doesn't yield anything. Peak times .707 isn't the RMS of anything, EXCEPT of a perfect sine wave.

My understanding of PEP is that the FCC doesn't want the power transmitted to exceed that which you find under the wave form of a sinewave (conveniently a long CW keydown) which has the power (area under the waveform) of 1500 watts into a resistive load.

For AM an unmodulated carrier can be at 1500 watts, but when you modulate it you add power. In the frequency domain the power goes into the sidebands; even

though the carrier is instantaneously changing its power is not. 100% modulation has 2/3 (I think) of the total power in the carrier and the rest in the sidebands.

Running your linear up to 1500 watts output and then AM modulating it at that power is an FCC no-no. 1500 watts PEP AM corresponds to a 100% modulated carrier less than 1500 watts, then.

Measuring the power under a SSB voice signal is virtually impossible because to do it you have to integrate the waveform instantly and constantly to find the power under it. Integrating a sine wave can be done over any time period longer than a wave length and the same power is yielded. An SSB waveform corresponding to 1500 watts will have a higher peak voltage than a 1500 w CW signal because voice is peakier than sines and so there is less area under the wave form in a given time period than for our old friend the sine wave.

Since most of us don't have supercomputers to perform this integration, PEP is calculated using some assumptions, and using averages. True PEP figures are not averages, so this is an approximation. The bottom line is don't ever put more power into your antenna than the EQUIVALENT of a 1500 watt sine wave. But to find out what you're doing, remember that RMS voltages and currents (supposedly given by peak x .707) haven't a thing to do with anything but the sine wave.

That was too long. And the old FCC guidelines of max. power given by the Input power to the final of your XMTR. was easier to figure since it required only cheap DC meters. The RMS power into your XMTR final (remember that in DC, RMS power is just $E \times R$) times its known (calculated) efficiency gave you the power under your output envelope.

The predominance of SSB requires a more effective way to limit Amateur operators' power output. Any questions? Good. Take out your exam books, you have three hours to complete the final. It's open anything, except your neighbor. Good luck.

de KR4GL

----- Forward Header -----
Subject: Re: PEP measurement
Author: John Seboldt <rohrwerk@netcom.com> at hdnsmt
Date: 5/12/95 3:17 AM

I said:

>
> >Boy, I don't know where folks got this. Check the regs, it's there.
> >1500W pep. Period. 1500 watts average power at the peak of an SSB
> >signal, or 1500 watts continuous carrier (=1500W PEP). Also 1500W PEP on
>

> >an AM signal, meaning a lower carrier power on AM (this makes the AM
> >boatanchor folks **very** unhappy).

And w8jitom@aol.com (W8JI Tom) said:

```
> I know where they got it. PEP is the peak RMS power. The other power used
> is the short term AVERAGE RMS power. They get confused and think the
> AVERAGE RMS power is just the RMS power, and the PEP is just the peak
> power and not the peak RMS power. On CW of course the short term average
> RMS power is exactly equal to the PEP power, but somehow that is
> confusing.
>
>
> And it is very common.
```

You've compounded the confusion! What we are after is the AVERAGE POWER AT THE PEAK OF A WAVEFORM, whether continuously varying as in a voice signal or relatively steady as in a carrier.

From the ARRL Handbook, 1988 edn, page 2-13:

"The terms RMS, average and peak have different meanings when they refer to AC power. The reason is that while voltage and current are sinusoidal functions of time, power is the product of voltage and current, and this product is a sine squared function. The mathematical operations that define RMS, average, and so on will naturally yield different results when applied to this new function. The relationships between ac voltage, current and power follow:

RMS voltage x RMS current = average power <does not equal> RMS power.

The average power used to heat a resistor is equal to the DC power required to produce the same heat. RMS power is a mathematical curiosity and has no physical significance. (underlines mine :-)

[a few cuts, then] In the context of radio signals, then, peak power means maximum average power. Peak envelope power (PEP) is the parameter most often used to express the maximum signal-handling capability of a linear amplifier. To compute the PEP of a waveform ... multiply the PEV (peak envelope voltage) by 0.707 to obtain the RMS value [of the VOLTAGE], square the result and divide by the load resistance."

The following is an attached File item from cc:Mail. It contains eight bit information which had to be encoded to insure successful trans-

mission through various mail systems. To decode the file use the UUDECODE program.

----- Cut Here -----

begin 644 SM.hqx

M =D969A=6QT

M

'^C

!<_^_____

F_Z08@ZZKV(.N

end

From owner-qrp-1@netcom.com Tue May 16 01:03:53 1995

Date: Mon, 15 May 1995 21:03:53 -0400 (EDT)

From: Michael Marmor <mmarmor@pluto.njcc.com>

Subject: Pixie 2

Message-Id: <Pine.BSI.3.91.950515205507.9808A-100000@pluto.njcc.com>

I just measured the output of my Pixie 2 using my OHR WM-1.
Is it possible that I am getting .5 watts from a plastic
case 2n2222a? That's what my meter says. I'm transmitting
into a dummy load so I don't think SWR is messing up my reading.
RX current draw is 9mA and TX is 126mA.

I quickly tried the circuit at 12V and got 1 watt out!! Is it
safe to use the pixie at 12V? I think the lm386-3 is a 9v
part - it still seems to work after a second or two at 12v.

Mike, AA2UJ
mmarmor@pluto.njcc.com

From owner-qrp-1@netcom.com Tue May 16 15:23:12 1995

Date: Tue, 16 May 1995 11:23:12 -0400

From: teda@meaddata.com (Ted Albert)

Message-Id: <9505161523.AA15795@rain.meaddata.com>

Subject: Re: Pixie 2

> I just measured the output of my Pixie 2 using my OHR WM-1.
> Is it possible that I am getting .5 watts from a plastic
> case 2n2222a? That's what my meter says. I'm transmitting
> into a dummy load so I don't think SWR is messing up my reading.
> RX current draw is 9mA and TX is 126mA.
>
> I quickly tried the circuit at 12V and got 1 watt out!! Is it

> safe to use the pixie at 12V? I think the lm386-3 is a 9v
> part - it still seems to work after a second or two at 12v.
>
> Mike, AA2UJ
> mmarmor@pluto.njcc.com

Hmmm.... .5 watt from a 2N2222A in that circuit seems kinda high. I just built my OHR watt meter and even though I followed the calibration instructions carefully, I still think it reads high. That might be due to the calibration of the voltmeter that I used for the setup of the OHR meter.

72 de Ted, KF8EE

From owner-qrp-l@netcom.com Mon May 15 21:03:29 1995
Date: Mon, 15 May 1995 14:03:29 -0700
From: myers@bigboy73.west.sun.com (Dana Myers)
Message-Id: <199505152103.0AA08704@vr1000.West.Sun.COM>
Subject: Re: Pixie 2 - "Build it" Rig from Dayton

> From: rgobrick@public.compusult.nf.ca (Robert J. Gobrick)
> Subject: Re: Pixie 2 - "Build it" Rig from Dayton
>
> I knew this qrp-l list has some first class technical people on board - that
> info is something I bet you I'd never find in any ham handbooks - thanks for
> making me just a little bit smarter today (it's just all those other brain
> cells that I seem to keep losing every day.. ;-)

The "motorboating" effect was common on the 9V powered transistor radios I used to have. I guess it isn't as common as it was 20 years ago since many radios are now powered by a small number of AA cells; though the voltage is lower, the impedance of the battery is much lower.

Speaking of transistor radios, one trick I learned from the closest thing I had to a mentor (Jim, WB6FMA) is to use transistor radios as audio sections for projects. You use the top of the volume control as audio input. I used to have a cheap radio with an RCA phono jack on it for this purpose. You might have to disconnect the AM detector if the background noise is objectionable.

From owner-qrp-l@netcom.com Tue May 16 12:51:13 1995
Date: Tue, 16 May 1995 10:21:13 -0230
Message-Id: <199505161251.KAA18746@public.compusult.nf.ca>
From: rgobrick@public.compusult.nf.ca (Robert J. Gobrick)

Subject: Re: Pixie 2 - "Build it" Rig from Dayton

Why heck - I'd leave the AM detector connected - this way you can listen to CW like that guy at Dayton who had a music tape on learning CW. All through the fleamarket you heard this Dah-di-Dah Kaaaay Dah-di-dah-dit Seeeeeee. And on and on and on throughout the weekend.

Just imagine with the the little transistor radio set-up doubling as an amp for your qrp project transceiver you can put real "swing" to your code by "beating" it against some "rap" music.... where's that second cup of coffee....

73/72 bob V01DRB/WA6ERB

>Speaking of transistor radios, one trick I learned from the closest
>thing I had to a mentor (Jim, WB6FMA) is to use transistor radios
>as audio sections for projects. You use the top of the volume control
>as audio input. I used to have a cheap radio with an RCA phono jack
>on it for this purpose. You might have to disconnect the AM detector
>if the background noise is objectionable.
>

From owner-qrp-1@netcom.com Wed May 17 01:20:18 1995
From: JimN00CT@aol.com
Date: Tue, 16 May 1995 21:20:18 -0400
Message-Id: <950516212015_121193915@aol.com>
Subject: Re: Pixie 2....The Bad News?....

I hate to rain on this nice Pixie 2 parade, but for those of you who have built this puppy up AND have oscilloscopes, check the power output. I knocked one together dead bug style last nite, and into a dummy load the waveform is Ugly. Even with the low pass filter, the waveform is still pretty gross.

I wondered about the 300 mW claims, and tried all manner of PA (2N3053, 2N3866, MRF 472, 2N3019) and could only get 300 mW out if running 24 volts on the supply. I will try a 2N2222A as the PA tonite. (Will also play with the oscillator, trying a metal can '2222A, and an MPS 6521 to replace the plastic '2222 that is there now).

So my guess is either all my transistors are junkie (they did come from the junkie boxe), or those ugly waveforms are giving the usual 'ugly waveform enhancement' to the wattmeter reading.

Ah, Devil's Advocate! Comes from too many readings of Morrison and Boyd in

college! Let's get some scopes on those pixies and see how they perform.

73, Jim N00CT

From owner-qrp-1@netcom.com Mon May 15 18:42:38 1995
Date: Mon, 15 May 1995 11:42:38 -0700 (PDT)
From: "John D. Spittle" <jds@freenet.vancouver.bc.ca>
Subject: QRP Club of British Columbia
Message-Id: <Pine.3.89.9505151110.A12130-0100000@freenet.vancouver.bc.ca>

My posting of yesterday doesn't seem to have made it. Here it is again with one correction.

QRP CLUB OF BRITISH COLUMBIA

13th May, 1995

```

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
x      NOTICE OF MEETING      x
x  DATE: Saturday 27th May 1995  x
x  PLACE: Home of Dave, VE7PCC    x
x      4545 - 47A St., DELTA, BC  x
x      tel. 946 0653              x
x  TIME: 10:45 to 15:00 PST       x
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

```

Non-members are welcome to join us but please phone Dave ahead of time so we know how many to expect. Arrangements will be made to meet those travelling by ferry from Vancouver Island.

"Show and tell" - bring your latest toys. Main item of discussion will be the development of a simple LCD digital readout for QRP transceivers with provision for IF offset and, most important, using inexpensive and readily available components.

NEWS IN BRIEF:-

John, K7R0, has come up with a (yet untested) design for a simple 455KHz ladder filter for SSB using inexpensive and readily available ceramic resonators. "Eat your heart out MuRata" if it works! John's 20/80M "Cascade" QRP transceiver is being sold in kit form by NorCal and created a lot of interest at Dayton. It sounds great on the air. Meanwhile Doug, KI6DS and Vern, W6MAA continue to put in good signals almost nightly from California with their Epiphytes. Both have planned a trip to Victoria for August. Dave, W6EMD, will also be visiting BC a few weeks later.

Rod, VE7ESA has now moved to Prince George and I understand has put together a number of QRP transceiver kits - most of which have now been acquired and built. When the domestic market becomes saturated I guess he can always turn to Japan!

The prototype Epiphyte II has now been on the air for a couple of months. Still intended primarily for portable operation, the two VN10s have been replaced with an IRF 510 driven by the ubiquitous CA3020A and the power requirements leave it light enough to backpack. I just hope that the CA3020A doesn't join the growing list of those "no longer available". It has been around for a long, long time. Maybe someone knows of a substitute.

Our membership list now includes packet and e-mail addresses. Let me know if you want an updated version. It costs too much to mail to everyone each time there is a change but it's always ready to send electronically.

72 Derry VE7QK
e-mail: jds@freenet.vancouver.bc.ca
packet: VE7QK@VE7KIT.#VANC.BC.CAN.NA

c:\winword\hamradio\qrpclub\meetings\95_05.doc
c:\gp\save\95_05.txt
c:\prowin\upload\95_05.txt

From owner-qrp-1@netcom.com Wed May 17 00:23:12 1995
From: adam@philadelphia.libertynet.org (Adam O'Donnell)
Message-Id: <9505170023.AA13659@philadelphia.libertynet.org>
Subject: QRP Rig design Ideas
Date: Tue, 16 May 1995 20:23:12 -0400 (EDT)

It seems that a few people want really really striped down, low I consumption, 10 part rigs and a few people want rigs with DDS, PLLs, PALs, and a little Pentium sitting on top to control band changes during contests.

This is what I propose. The design is simple, but will lend itself to easy modification and insertion of a few goodies (Like the WB0VNE DDS system.)

Ditch the NE602
Dual band coverage. (The builder would be able to decide which bands he would like in his rig.)
Semi-QSK
300hz bandwidth IF CW filter

Single Conversion SuperHet (This is up for discussion)
Leave out the NE-602
Low part usage
Receive power consumption of 35mA or less
All PC-Board construction
NO NE-602 mixer
Varactor tuning
Easy construction

And provisions for:

RIT
S meter
DDS (not too hard with the WB0VNE DigiVFO circuit)

That just about covers it. Please send mail with suggestions for the changes for goals.

The only way this project will get off the ground is with set boundaries.

72, 73

--

Adam O'Donnell, N3RCS
Internet: adam@libertynet.org

My parents tell me that I just take up time and space. It's true -
I'm into relativity theory.

-----BEGIN PGP PUBLIC KEY BLOCK-----
Version: 2.6.2

mQCNAy9yMS8AAAEAL6X3T00KvDKreSRKPcrBC2gV0R0u8BKtzPpgkNuXxPXUxAU
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tCRBZGFtIE8nRG9ubmVsbCA8YWRhbUBsaWJlcnR5bmV0Lm9yZz4=
=J0fv
-----END PGP PUBLIC KEY BLOCK-----

From owner-qrp-1@netcom.com Tue May 16 20:51:37 1995
Message-Id: <sfb8c9e9.003@ngwmail.ais.umn.edu>
Date: Tue, 16 May 1995 15:51:37 -0500
From: Rick Jandrt <r-jand@ngwmail.ais.umn.edu>
Subject: Subscribe?

How do I subscribe to this list server?

Rick Jandrt - Systems Software Programmer - WB9PII
University of Minnesota Voice: (612) 624-6323
1300 So. 2nd St. Suite 626F Fax: (612) 626-1332
Minneapolis, Minnesota 55454-1029 Internet: r-jand@cafe.tc.umn.edu

From owner-qrp-l@netcom.com Tue May 16 12:01:07 1995
Date: Tue, 16 May 95 08:01:07 EDT
From: mitchell@dtc.kodak.com (Brad Mitchel)
Message-Id: <9505161201.AA16023@dzx57d.dtc.kodak.com>
Subject: Surface Mount

Hi all, I have read a bit about surface mount and the plusses and minuses. I have worked for the last 10 years in manufacturing Test R&D. We went from through hole to SM several years ago, and shipped all the low tech through hole stuff to Mexico! So the bottom line is, that surface mount stuff is really neat! Less holes to drill, smaller boards, etc. Why would anybody not want to try it??

Soldering chip resistors and caps, use tweezers, and a soldering iron for our type of work. Soldering components, use the fine tip iron.. what's the big deal?

I bet that if sm technology was used for the Sierra, it could have all the band modules stuffed in one box the same size as it is now with one at a time.. no value?? I see otherwise.

If I could just get some time, I would take Dave Benson's NN1G and make it in Surface Mount, but alas, that time factor..

So you guys with time on your hands, or more motivation, just do it. Maybe an nn1g would compete with the Qubic incher for GQRP headlines??

73 Brad WB8YGG

From owner-qrp-l@netcom.com Tue May 16 17:31:49 1995
Message-Id: <n1411498549.46431@msmailgw1.arlut.utexas.edu>
Date: 16 May 1995 11:31:49 -0600
From: "rohre" <rohre@arlut.utexas.edu>
Subject: The Radio Shack Icom-Yaesu mike

Dr. Rick and the group:

FYI---the RS speaker mike, if it was the 19-310 is \$19.95 U.S. but the 1993 catalog was all I could find at the moment---a new one is around here. It will fit the Ramsey kits, of the VHF variety at least, and both the Radio Shack HT's and the older Icoms/ Yaesu's, at least.

72, Stuart K5KVH

rohre@arlut.utexas.edu

From owner-qrp-1@netcom.com Tue May 16 09:28:16 1995
From: bauer@hrz.uni-kassel.de (Stefan Bauer)
Message-Id: <9505160928.AA11337@hrz-ws40.hrz.uni-kassel.de>
Subject: The thrill of it all .. PART II
Date: Tue, 16 May 1995 11:28:16 +0200 (MES)

From owner-qrp-1@netcom.com Tue May 16 14:41:28 1995
From: bauer@hrz.uni-kassel.de (Stefan Bauer)
Message-Id: <9505161441.AA10918@hrz-ws38.hrz.uni-kassel.de>
Subject: The Thrill of it all ... PART II
Date: Tue, 16 May 1995 16:41:28 +0200 (MES)

I don't know if the mail got send so agn. If it did, sri for posting it twice!

Here is an other DX QRP story:

Last week I was calling CQ on abt 14.060 Khz. It was abt 20.00 ZULU and 20m seems to be dead to me.

The rig here for QRP is an Atlas 210x wid 5 wtts powerd by a 10 Ah gel cell feed from a 12 wtts solar panel. Antenna is a Delta Loop mounted on a bamboo tower (3 elements for abt 15 Bucks from a local gardening-store).

So I was calling CQ, what I usally don't do, but if there is nothing going on out there, I can't keep quiet.

After a abt 5 min. calling it just blew me away when this LU3 station came back. He gave me a 449 and X-Mas was on here on my side.

I was so happy that a LU3 near Cape Horn came back, that I had some problems concentrating on the code. But we finally did it. It was a solid and stable signal all the way thru.

Thinking abt the condx in this days I'm more than happy abt this QS0.

Take care for now and keep on QRP'in.

Is there anybody active in grayline DX on 14.060 from VE - Land ?????

Steve DL1FDF ex VE3VMY G-QRP# 8769 from KASSEL - Jerkmany

PS: sri abt mistkes

From owner-qrp-1@netcom.com Mon May 15 22:41:49 1995
Subject: Re: Tree time & other vagaries of the mind
Date: Mon, 15 May 1995 15:41:49 -0700
Message-Id: <10338.800577709@safety.ics.uci.edu>
From: Clark Savage Turner WA3JPG <turner@safety.ICS.UCI.EDU>

Yon QRP'ers have a lean and hungry look....such men are dangerous!

Well, OK, I'll stop. Just wanted to add my two cents. I have hurt myself with sling shots, the weight backfired and hit me in the shoulder. I was never that accurate. BUT, I used to fish a LOT, so I got out my spin fishing kit (fresh water) and used a 1 ounce weight. Not quite as much power, but very very accurate. I can get a particular limb in a few tries. Worth a try when you need it.

Clark
WA3JPG

From owner-qrp-1@netcom.com Tue May 16 03:40:32 1995
Date: Mon, 15 May 1995 20:40:32 -0700
Message-Id: <199505160340.UAA26421@mailhost.primenet.com>
From: markem@PrimeNet.Com (Mark Monninger)
Subject: Re: Tree time & other vagaries of the mind

At 08:53 AM 5/15/95 -0700, Roger Hightower wrote:

> ...
>A pack of 1 oz sinkers is a durned sight cheaper than one arrow, and there
>is less potential for damage to anyone on the far side of the target.
>

Having been on FD with Roger, I can attest to the truthfullness of the last statement above.

Just couldn't resist.... ;-)

73... Mark AA7TA

From owner-qrp-1@netcom.com Tue May 16 12:09:47 1995
Date: Tue, 16 May 95 8:09:47 EDT
Message-Id: <heH8+oR7ijA@PAMDT.ANG.AF.MIL>
From: <CBAILEY@PAMDT.ANG.AF.MIL> (MSgt Cameron C.R. Bailey)
Subject: RE: Tree time & other vagaries of the mind

Joe,

I laugh everytime this comes up. (no pun intended).
One of our QRP locals busted his tooth and spent
his field day at the dentist!
I tie a string on the end of an electricians pocket
knife (blades in, of course). Then, I do the David
vs Goliath routine and wind up for the pitch, leaving
go before the string burns the hands. I don't stop
the string till it hits the ground. I would suggest
that you not use your good Craftsman box wrenches.
I still have one stuck in a tall tree somewhere near
Chicago.....

de kt3a

Cam Bailey
SOGNET LAN Administrator (Banyan)
211 Engineering Installation Squadron
Fort Indiantown Gap (Annville) PA
DSN: 491-8737 Comm: 717-861-8737 FAX: 8268

From owner-qrp-1@netcom.com Tue May 16 19:24:27 1995
Message-Id: <199505161927.0AA16369@ns.onramp.net>
Date: Tue, 16 May 1995 14:24:27 -0500
From: cmassey@Onramp.NET (Cleve Massey)
Subject: Windom/G5RV/???

Greetings to qrp-1:

Finally getting some trees trimmed and able to put up 125ft. or so of wire
for antenna...

Off-center fed windom or G5RV???

Is windom better fed with 300 ohm or coax???

This will be my only HF antenna...too many closed space trees for a beam or the like, so want the best bang for my 3 watts!

tnx...cleve/wd5bor

Some people never find it
Some only pretend
But I just want to live
Happily ever after, now and then

From owner-qrp-l@netcom.com Wed May 17 01:51:46 1995
From: JCoote@aol.com
Date: Tue, 16 May 1995 21:51:46 -0400
Message-Id: <950516215120_121240472@aol.com>
Subject: Re: WW2 RX to qrp Tcvt

A few comments on TCS radios.

(For those who just tuned in, the TCS series were US Navy gear, WW2 era. Heavy duty, shock-mounted and cool wrinkle black cabinets. They consisted of separate receiver and transmitter and covered 1.5-12 MHz I believe. The radios had several crystal controlled channels and VFO to choose from. They were capable of AM and CW. With 1625 or 807 tubes in the finals, power was probably in the 25-40 watt region. The radios tuned directly into a wire antenna, I think 25-50 feet long.)

To find schematics, I suggest asking around on QRP-L for the address of FAIR RADIO in Lima, Ohio. They had a lot of TCS equipment 15-20 years ago, and may have the manuals.

If you're restoring older "valve" radios beware of old electrolytic capacitors in the radios. After being dormant for years, a surge of high voltage may send them up in smoke.

I had the pair of TCS Rx/Tx and HV power supply 20 years ago and wish I had them now. My inclination would be to restore them to near-original condition without ham mods.

72, Jay WB6AAM ARCI 5050